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NOTICE OF ALLOWANCE AND FEE(S) DUE

7590

04/10/2008

BRUCE H. TROXELL SUITE 1404 5205 LEESBURG PIKE FALLS CHURCH, VA 22041 EXAMINER
TALBOT, BRIAN K

PAPER NUMBER

ART UNIT 1792 DATE MAILED: 04/10/2008

 APPLICATION NO.
 FILING DATE
 FIRST NAMED INVENTOR
 ATTORNEY DOCKET NO.
 CONSERMATION NO.

 10766,907
 11/14/2003
 Chine-Hum Chao
 BHT-3167-164
 7660

TITLE OF INVENTION: METHOD OF FABRICATING CARBON NANOTUBE FIELD EMISSION SOURCE

| APPLN. TYPE | SMALL ENTITY | ISSUE FEE DUE | PUBLICATION FEE DUE | PREV. PAID ISSUE FEE | TOTAL FEE(S) DUE | DATE DUE |
|----------------|--------------|---------------|---------------------|----------------------|------------------|------------|
| nonprovisional | NO | \$1440 | \$300 | \$0 | \$1740 | 07/10/2008 |

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and I/2 the ISSUE FFE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

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| appropriate. All further indicated unless corrects maintenance fee notifica | correspondence includir ed below or directed oth | ng the Patent, advance on herwise in Block 1, by (a | rders and notification of n a) specifying a new corres | naintenance fees wi pondence address; | II be r and/or | nailed to the current (b) indicating a sepa | correspondence address as arate "FEE ADDRESS" for |
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| FALLS CHURC | H, VA 22041 | | | | | | (Depositor's name) |
| | | | | | | | (Signature) |
| | | | | | | | (Date) |
| APPLICATION NO. | FILING DATE | | FIRST NAMED INVENTOR | | ATTOE | RNEY DOCKET NO. | CONFIRMATION NO. |
| 10/706,907 TITLE OF INVENTION | 11/14/2003 : METHOD OF FABRIO | CATING CARBON NAN | Ching-Hsun Chao IOTUBE FIELD EMISSIC | N SOURCE | В | HT-3167-164 | 7660 |
| APPLN. TYPE | SMALL ENTITY | ISSUE FEE DUE | PUBLICATION FEE DUE | PREV. PAID ISSUE | FEE | TOTAL FEE(S) DUE | DATE DUE |
| nonprovisional | NO | \$1440 | \$300 | \$0 | | \$1740 | 07/10/2008 |
| EXAM | IINER | ART UNIT | CLASS-SUBCLASS | | | | |
| TALBOT, | BRIAN K | 1792 | 427-077000 | | | | |
| 1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.563). Change of correspondence address for Change of Correspondence Address from PTO/SB/122) and Landard. Fee Address' indication (or "Fee Address" Indication form PTO/SB/147; Bee 0.03-02 or more cent) attached. Use of a Customer PTO/SB/147; Bee 0.03-02 or more cent) attached. Use of a Customer Number is required. Namber is PTO/SB/147; AMME AND RESIDENCE DATA TO BE PRINTED ON | | | 2. For printing on the page list (1) the names of up to 3 registered patent attorneys or agents OR, alternatively. 2. Other name of a nighe firm (having as a member a registered attorney or agent) and the names of up to 2 registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is 1 listed, no name will be printing to the name of the patent of the name of the nam | | | | |
| PLEASE NOTE: Uni recordation as set fort (A) NAME OF ASSI | less an assignee is ident h in 37 CFR 3.11. Comp GNEE | | data will appear on the pa T a substitute for filing an (B) RESIDENCE: (CITY | atent. If an assigner assignment. and STATE OR CO | OUNT: | RY) | ocument has been filed for |
| 4a. The following fee(s) Issue Fee Publication Fee (N Advance Order - | vo small entity discount p | | D. Payment of Fee(s): (Plea A check is enclosed. Payment by credit can The Director is hereby overpayment, to Depo | d. Form PTO-2038 | is attac | ched. | shown above) ficiency, or credit any n extra copy of this form). |
| | s SMALL ENTITY state | is. See 37 CFR 1.27. | b. Applicant is no long | | | | |
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| Authorized Signature | | | | Date | | | |
| Typed or printed name | | | Registration No. | | | | |
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| 10/706,907 | 11/14/2003 | Ching-Hsun Chao | BHT-3167-164 | 7660 | |
| 7590 04/10/2008 | | | EXAMINER | | |
| BRUCE H. TROXELL | | | TALBOT, BRIAN K | | |
| SUITE 1404 | | | ART UNIT | PAPER NUMBER | |
| 5205 LEESBURG PIKE FALLS CHURCH, VA 22041 | | | 1792 DATE MAII ED: 04/10/2008 | | |

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 641 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 641 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability

| Application No. | Applicant(s) | |
|-----------------|--------------|--|
| 10/706,907 | CHAO ET AL. | |
| Examiner | Art Unit | |
| Brian K. Talhot | 1702 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

 This communication is responsive to RCE filed 2/19/08. The allowed claim(s) is/are 10-14,16 and 17. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) \square All b) ☐ Some* c) ☐ None of the: 1. T Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). * Certified copies not received: _____. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6.

DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. | Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application 2. Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413), Paper No./Mail Date Information Disclosure Statements (PTO/SB/08). 7. T Examiner's Amendment/Comment Paper No./Mail Date 4. ☐ Examiner's Comment Regarding Requirement for Deposit 8. X Examiner's Statement of Reasons for Allowance of Biological Material Other .

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Continued Examination Under 37 CFR 1.114

 A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/19/08 has been entered.

- The non-entered amendment filed 12/12/07 has been entered per filing the RCE. Claims
 1-9,15 and 18-19 have been canceled. Claims 10-14 and 16-17 remain in the application.
- 3. In light of the amendment filed 12/12/07, the 35 USC 103 rejection has been withdrawn.

Allowable Subject Matter

Claims 10-14 and 16-17 are allowed.

Reasons for Allowance

5. The following is an examiner's statement of reasons for allowance:

The prior art of record fails to teach or fairly suggest a method of forming CNT emitting sources using a negative imprint mold, filing CNT paste in the imprint mold and imprinting the Application/Control Number: 10/706,907

Art Unit: 1792

CNT paste to form emitting sources whereby the negative mold comprising a trench pattern housing said gate lines so as to prevent CNT paste in the negative mold from adhering to the gate line while forming the emitting sources. The prior art teaches imprinting emitting sources but does not teach the negative mold having trenches with CNT paste not being applied to the gate line (see Fig. 6).

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance"

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian K. Talbot whose telephone number is (571) 272-1428. The examiner can normally be reached on Monday-Friday 8AM-4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy H. Meeks can be reached on (571) 272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Brian K Talbot/ Primary Examiner Art Unit 1792

BKT